

11. (New) The method of Claim 10, wherein the plant is selected from the group consisting of *Arabidopsis*, *Glycine*, *Vicia*, rape-seed, *Helianthus*, *Gossypium*, sugar beet, *Oryza*, *Saccharum*, corn, and *Sorghum*.

12. (New) The method of Claim 10, wherein the polynucleotide is introduced into the plant on a vector.

13. (New) The method of Claim 10, wherein the polynucleotide is introduced into a chromosome of the plant.

14. (New) A method of increasing the resistance of a plant to high salt conditions, comprising introducing a polynucleotide encoding a protein comprising the amino acid sequence in SEQ ID NO:2 into the plant, wherein the protein is expressed in an amount sufficient to increase resistance of the plant to high salt conditions, wherein the resistance of the plant to high salt conditions is higher compared to the plant prior to introducing the polynucleotide.

15. (New) The method of Claim 14, wherein the plant is selected from the group consisting of *Arabidopsis*, *Glycine*, *Vicia*, rape-seed, *Helianthus*, *Gossypium*, sugar beet, *Oryza*, *Saccharum*, corn, and *Sorghum*.

16. (New) The method of Claim 14, wherein the polynucleotide is introduced into the plant on a vector.

17. (New) The method of Claim 14, wherein the polynucleotide is introduced into a chromosome of the plant.

18. (New) A method of increasing drought resistance of a plant, comprising introducing a polynucleotide, which comprises SEQ ID NO:3 or a nucleotide sequence which hybridizes under stringent conditions to the complement of SEQ ID NO:3 into the plant, wherein the polynucleotide encodes a protein with galactinol synthetase activity and wherein the polynucleotide expresses the protein in an amount sufficient to increase the drought

resistance of the plant, wherein the drought resistance of the plant is higher compared to the plant prior to introducing the polynucleotide; and wherein the stringent conditions comprise washing at 60°C in 0.1 X SSC and 0.1% SDS.

19. (New) The method of Claim 18, wherein the polynucleotide comprises SEQ ID NO:3.

20. (New) The method of Claim 18, wherein the polynucleotide comprises the nucleotide sequence which hybridizes under stringent conditions to the complement of SEQ ID NO:3.

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21. (New) The method of Claim 18, wherein the plant is selected from the group consisting of *Arabidopsis*, *Glycine*, *Vicia*, rape-seed, *Helianthus*, *Gossypium*, sugar beet, *Oryza*, *Saccharum*, corn, and *Sorghum*.

22. (New) The method of Claim 18, wherein the polynucleotide is introduced into the plant on a vector.

23. (New) The method of Claim 18, wherein the polynucleotide is introduced into a chromosome of the plant.

24. (New) A method of increasing the resistance of a plant to high salt conditions, comprising introducing a polynucleotide, which comprises SEQ ID NO:3 or a nucleotide sequence which hybridizes under stringent conditions to the complement of SEQ ID NO:3 into the plant, wherein the polynucleotide encodes a protein with galactinol synthetase activity and wherein the polynucleotide expresses the protein in an amount sufficient to increase the resistance of the plant to high salt conditions, wherein the resistance of a plant to high salt conditions is higher compared to the plant prior to introducing the polynucleotide; and wherein the stringent conditions comprise washing at 60°C in 0.1 X SSC and 0.1% SDS.

25. (New) The method of Claim 24, wherein the polynucleotide comprises SEQ ID NO:3.

26. (New) The method of Claim 24, wherein the polynucleotide comprises the nucleotide sequence which hybridizes under stringent conditions to the complement of SEQ ID NO:3.

27. (New) The method of Claim 24, wherein the plant is selected from the group consisting of *Arabidopsis*, *Glycine*, *Vicia*, rape-seed, *Helianthus*, *Gossypium*, sugar beet, *Oryza*, *Saccharum*, corn, and *Sorghum*.

28. (New) The method of Claim 24, wherein the polynucleotide is introduced into the plant on a vector.

29. (New) The method of Claim 24, wherein the polynucleotide is introduced into a chromosome of the plant.
